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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,809	11/03/2003	Mitsuru Arai	03665/LH	4459

1933 7590 04/20/2007

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EXAMINER	
WEINSTEIN, LEONARD J	
ART UNIT	**PAPER NUMBER**
3746	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/699,809	ARAI ET AL.	
	Examiner	Art Unit	
	Leonard J. Weinstein	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 5-9 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 5-9 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the amendment of February 21, 2007. In making the below rejection and/or objections the examiner has considered and addressed each of the applicant's arguments.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Rometsch et al. 4,077,745. Rometsch teaches all the limitations as substantially claimed for a volume control apparatus of a radial piston pump regulating a volume by positioning a cam ring of the radial piston pump including: a servo piston 15' which presses the cam ring so as to position the cam ring 13, an oil chamber 34 corresponding to the servo piston 15', wherein the servo piston 15' is driven in accordance with a driving pressure in the oil chamber 34 (col. 3 ll. 53-57), and a control valve 40 which is built-in the servo piston 15', and which controls inflow and outflow of oil in the oil chamber 34, and which is positioned by applying a volume control pressure, via element 42, thereto, wherein the driving pressure in the oil chamber 34 is changed by changing the position of the control valve 40 by controlling the volume control pressure applied to the control valve 40 (col. 3 ll. 60-65); and a control valve 40 is slidable with respect to the servo piston, element 35 of element 15'.

3. Claims 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuroyanagi et al. 4,652,215. Kuroyanagi teaches all the limitations as substantially claimed for a volume control apparatus of a radial piston pump regulating a volume by positioning a cam ring of the radial piston pump including: a servo piston, elements 30 and 60, which presses the cam ring 4

so as to position the cam ring 4, an oil chamber 17 corresponding to the servo piston, elements 30 and 60, wherein the servo piston, elements 30 and 60, is driven in accordance with a driving pressure in the oil chamber 17 (col. 4 ll. 31-33), and a control valve, elements 64 and 65, which is built-in the servo piston, elements 30 and 60, and which controls inflow and outflow of oil in the oil chamber 17, and which is positioned by applying a volume control pressure thereto (col. 4 ll. 62-68), wherein the driving pressure in the oil chamber 17 is changed by changing the position of the control valve, elements 64 and 65, by controlling the volume control pressure applied to the control valve, elements 64 and 65; and a servo piston, elements 30 and 60, oil chamber 17 and control valve, elements 64 and 65, are positioned at a first side of the cam ring 4, and the volume control apparatus further comprises another set of a servo piston, elements 30 and 50, oil chamber 16, control valve, elements 54 and 55, positioned at a second side of the cam ring 4 which is opposite, as shown in figure 2, to the first side of the cam ring 4.

Response to Arguments

4. Applicant's arguments filed 02/13/2007 have been fully considered but they are not persuasive.

5. With regards to the Kuroyanagi reference the applicant argues that the control valve of the present invention, clearly does not correspond to "a control valve which is built-in the servo piston, and which controls inflow and outflow of oil in the oil chamber, and which is positioned by applying a volume control pressure thereto" with regard to newly presented claim 5. The applicant also argues that Kuroyanagi does not disclose, teach or suggest "a control valve which is built-in the servo piston, and which controls inflow and outflow of oil in the oil chamber, and which is positioned by applying a control pressure thereto" with regards to newly presented claim 8.

6. In response to applicants argument that the control chamber of Kuroyanagi does not correspond with a control valve that is built-in a servo piston, it is pointed out that the elements 30 and 60 constitute a servo piston wherein element 65, a control chamber, and a spring, element 64, are disposed within. These elements constitute a control valve permitting a flow of fluid from element 66 considered to be an oil chamber. It is noted by the examiner that the recitation of a "control valve" is not limiting and could be interpreted to be a spring, such as element 64, that permits a flow of fluid which is applied to a piston such as element 60. Therefore the control chamber of Kuroyangi in conjunction with the spring as discussed does correspond to a control valve with regards to new presented claims 5 and 8.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. The prior art made of record is considered pertinent to applicant's disclosure are cited on form 892 herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is 571-272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJW

ANTHONY D. STASHICK
SUPERVISORY PATENT EXAMINER
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